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02/13/2004	Harald Hirschmann	MERCK-2834	8945
90 04/11/2005	•	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400		WU. SHEAN CHIU	
		ART UNIT	PAPER NUMBER
VA 22201		1756	
	02/13/2004 90 04/11/2005 HTE, ZELANO & BRA DON BLVD.	02/13/2004 Harald Hirschmann 90 04/11/2005 HTE, ZELANO & BRANIGAN, P.C. DON BLVD.	02/13/2004 Harald Hirschmann MERCK-2834  90 04/11/2005 EXAM HTE, ZELANO & BRANIGAN, P.C. DON BLVD. ART UNIT

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
Office Action Summary		10/777,201	HIRSCHMANN ET AL.	
		Examiner	Art Unit	
	Shean C. Wu	1756		
Period fe	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	e correspondence address	İ
THE - External after after - If the - If NO - Failt Any	MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.1 r SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS to cause the application to become ABAND	te timely filed  days will be considered timely.  from the mailing date of this communication.  DNED (35 U.S.C. § 133).	
Status				
2a)⊠	Responsive to communication(s) filed on <u>16 D</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowal closed in accordance with the practice under E	s action is non-final. nce except for formal matters,		
Disposit	ion of Claims			
5)⊠ 6)⊠	Claim(s) <u>1-4 and 6-35</u> is/are pending in the appear of the above claim(s) is/are withdraw Claim(s) <u>1-3,6-13,15-18,23 and 26-35</u> is/are all Claim(s) <u>4,14,19,20,22 and 24-25</u> is/are reject Claim(s) <u>21</u> is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration. llowed. ed.		
Applicat	ion Papers			
10)□	Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	epted or b) objected to by the drawing(s) be held in abeyance. tion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).	
Priority (	under 35 U.S.C. § 119			
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureau  See the attached detailed Office action for a list	is have been received. Is have been received in Application in App	cation No eived in this National Stage	
Attachmen	• •	p		
2) 🔲 Notic 3) 🔯 Infon	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date 12/16/04.	4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:		



#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

1. Claims 14 and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 14, the phenyl ring substituted by L in 3 and 5 positions is vague because the notation r is not limited to 2.

In Claims 19-20, the medium comprising "two or more" is vague because the medium comprises at least five or more compounds.

2. Claims 4 recites the limitation "alkyl" in formulae Id and Ie. There is insufficient antecedent basis for this limitation in the claim. See the definition of  $R^b$  in formula I in Claim 1, which  $R^b$  is an alkenyl group.

Also, Claim 24 is rejected because the "liquid crystalline compound" does not have an antecedent basis.

3. Claim 21 and 24 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 13, 32-34 and 16, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The compounds of the formula I in Claims 13 and 21 are the same.

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## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Bezborodov et al. (Liquid Crystals, 2000, Vol.27, No. 7, pages 935-941).

The reference discloses a compound represented by 1,4-bis (trans-4-alkenyl-1-cyclohexyl) benzenes (formula (id) on page 937). The reference anticipates the claimed compound 1,4-bis [trans-4-(prop-1-enyl)-cyclohexyl] benzene (see compound Id in section 3.7 on page 940).

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bezborodov et al. above.

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The present claim differs from the reference in that the reference does not specify the compound of 1,4-bis [trans-4-(prop-1-enyl)-cyclohexyl] benzene can be used in liquid crystal display device. It would have been obvious to those ordinary skilled in the art to realize and take advantage of the reference compound to use in liquid crystal display device because the reference compound possess the liquid crystal properties.

## Allowable Subject Matter

8. Claims 1-3, 6-13, 15-18, 23 and 26-35 are allowed.

#### Response to Arguments

- 9. Applicant's arguments filed 12/16/05, with respect to the rejection(s) of claim(s) 1-7, 9-10 and 13-17 under DE 4,426,799 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. Applicants further argue that compound of Bezborodov only teaches the genus of compounds. Applicant's attention is directed to compound Id in section 3.7 on page 940. Therefore the rejection under Bezborodov is still maintained. Also, upon further consideration, new grounds of rejection are made in view of Bezborodov et al. and 112 rejections cited in sections 1-2 above.
- 10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shean C. Wu whose telephone number is 571-272-1393. The examiner can normally be reached on 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shean C Wu

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Primary Examiner Art Unit 1756 Page 6

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